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By

Eric L. Maldonado

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Attorney Docket No. NEKW 17.876 (100806-17311)

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Inventor: Hideo SHIBAHARA  
Serial No.: 09/689,114  
Filed: October 12, 2000  
Title: LIQUID CRYSTAL DISPLAY...  
Examiner: Prasad R. Akkapeddi  
Art Unit: 2871  
Con. No.: 6403

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**FEB 20 2004**

February 12, 2004

Director of the U.S. Patent and  
Trademark Office  
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**INFORMATION DISCLOSURE STATEMENT**

S I R:

In order to comply with discretionary rules 37 CFR §§1.97 and 1.98, attached hereto is a copy of Form PTO-1449 and a copy of the documents listed thereon. This document contains information in which the Examiner may consider to be important in deciding whether to issue a patent in the instant application.

Also attached is a copy of a Translation of Rejection Reasons from an Office Action issued on November 19, 2003 from the corresponding Taiwanese Patent Application. All of the documents listed in Form PTO-1449 appear in the Translation of Rejection Reasons.

As some of these documents are written in a language other than English, English Language abstracts are annexed thereto explaining their relevancy in accordance with 37 CFR §1.98(a)(3).

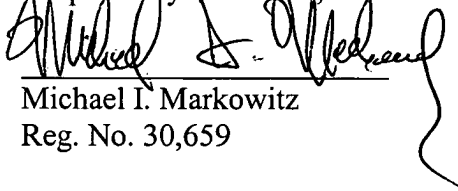
Each item of information contained in the information disclosure statement was first cited in a communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this information disclosure statement, so no fee is due.

The present Information Disclosure Statement is being submitted in compliance with 37 §CFR 1.56 as an Examiner might consider any cited document important in deciding whether to allow the application to issue as a patent, but the citation of each document is not to be construed as an admission that such document is necessarily relevant or prior art. No representation is intended that the cited documents represent the results of a complete search, and it is anticipated that the Examiner in the normal course of examination, will make an independent search and will determine the best prior art consistent with 37 CFR 1.104 (a), and in the course of such search will review for relevance every document cited on the attached form even if not initialed.

Early and favorable consideration is respectfully solicited.

**Any fee due with this paper may be charged on Deposit Account 50-1290.**

Respectfully submitted,



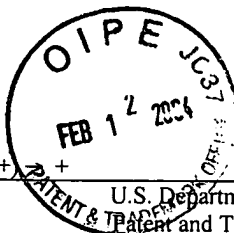
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Docket No.: NEKW 17.876(100806-17311)



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**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

Sheet 1 of 1

Application No. : 09/689,114  
Filing Date : October 12, 2000  
First Named Inventor: H. SHIBAHARA  
Group Art Unit : 2871  
Examiner Name : P.R. AKKAPEDDI  
Attorney Docket No. : NEKW 17.876

**U.S. PATENT DOCUMENTS**

Examiner Initials	Cite No. <sup>1</sup>	U.S. Patent Document	Kind Code if known <sup>2</sup>	Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns Lines Where Relevant Passages or Relevant Figures Appear
		5,757,451		MIYAZAKI, et al.	05/26/1998	
		5,739,888		OGURA, et al.	04/14/1998	
		5,729,312		YAMAGISHI, et al.	03/17/1998	

**FOREIGN DOCUMENTS**

Examiner Initials	Cite No. <sup>1</sup>	Foreign Patent Document Office <sup>3</sup> Number <sup>4</sup> Kind Code <sup>5</sup> (if known)	Country	Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YY/Y	Pages, Columns Lines Where Relevant Passages or Relevant Figures Appear
		10-082909	JP	DAINIPPON PRINTING CO LTD	03/31/1998	
		10-104606	JP	TORAY IND INC	04/24/1998	

**Other Prior Art-Non Patent Literature Documents**

Examiner Initials	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), data, page(s), volume-issue number(s), publisher, country, where published, source.	Applicant check here if English language translation attached
Examiner Signature		Date Considered	

Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw a line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup>Unique citation designation number. <sup>2</sup>See attached Kinds of U.S. Patent Documents. <sup>3</sup>Enter Office that Issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup>For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup>Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.1<sup>6</sup> if possible. <sup>6</sup>Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take .2 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

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**TRANSLATION OF REJECTION REASONS** (Primary Examination)

1. Application No.: 089121533
2. Title of the invention: Liquid Crystal Display Panel with Wide Column Spacers for Keeping Gap Constant and Process for Fabrication Thereof
3. Applicant: NEC LCD Technologies, Ltd.
4. Filed: Oct. 13, 2000
5. Decision: This application is rejected on the ground of the stipulation of Article 20, No. 2 of Patent Law

**Rejection Reasons:**

This application relates to a liquid crystal display panel and is characterized by that column spacers therein are comprised of R/G/B and occupy a specific ratio of total pixel area.

However, the technology recited in this application, namely laminating R/G/B to form the column spacers which are distributed among the pixels, is known and used. For example, it has been disclosed in US 5757451, JP 10-82909, and JP 10-104606.

Although this application emphasizes that column spacers occupy a specific ratio of total pixel area, it is obvious that change may be easily made with respect to the size and number of column spacers depending on actual demand. Thus, this application lacks inventive step.

In addition, not only spherical spacers disclosed in this application but also the preparation of transparent or opaque spacers has been disclosed, for example, in US 5739888 and US 5729312. Consequently, this application lacks inventive step.

Summing up the above, this application is obvious and can be easily achieved by utilizing conventional technology and knowledge. This application does not meet the statutory requirements for patentability, and thus should not be granted a patent according to the stipulation of Article 20, No. 2 of Patent Law.

**Our Comments:**

Please compare this application with cited references in their constructions and achievable functions. We must persuade the Examiner that this application, when compared with cited references, cannot be easily achieved by a person having ordinary skill in the art. For this purpose, the difference in the construction between this application and cited references, and the inventive step of the former over the latter must be emphasized in Re-examination. Your expert comment concerning this is highly appreciated.

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# 經濟部智慧財產局專利核駁審定書

受文者：NEC液晶科技股份有限公司（代理人

：周良謀 先生、周良吉 先生）

地址：新竹市東大路一段一一八號十樓

發文日期：中華民國九十二年十一月十九日

發文字號：（九二）智專二（六）01075字

第〇九二二一一六九八三〇號

一、申請案號數：〇八九一二一五三三

專利分類IPC(7)……G02F 1/1339, 1/1333

二、發明名稱：具有用以保持間隙恒定之寬柱狀分隔體的液晶顯示板及其製造方法

三、申請人：

名稱：NEC液晶科技股份有限公司

地址：日本

四、專利代理人：

姓名：周良謀 先生

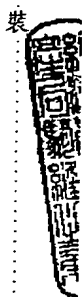
地址：新竹市東大路一段一一八號十樓

姓名：周良吉 先生

地址：新竹市東大路一段一一八號十樓

五、申請日期：八十九年十月十三日





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六、優先權項目：

1 1999/10/15 日本11-293794

七、審查人員姓名：劉瑞祥 委員

八、審定內容：

主文：本案應不予專利。

依據：專利法第二十條第二項。

理由：

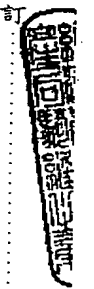
(一) 本案所述內容為關於液晶顯示元件，其所主張之專利特徵為元件中之柱狀分隔體由三原色所構成且佔總像素面積之一定比例。

(二) 經查本案所述以三原色疊層形成柱狀分隔體並使之分散於各像素間之技術均為習知且習用者，如US 5757451、JP 10-82909、10-104606前案。

(三) 本案雖強調柱狀分隔體佔總像素面積之一定比例，然柱狀分隔體之大小及數量多少等均可依實際需要而改變，乃顯而易知且易於完成者，不具進步性。

(四) 又，本案所述球狀分隔體之使用亦為習知且習用者，且透明或不透明球體分隔物之製備亦為習知且習用者，不具進步性，如US 5739888、5729312前案。

(五) 綜上所述，本案所述內容均為由習用技術、知識所顯而易知且易於完成者，不具進步性。



(六) 檢附 US 5757451、JP 10-82909、10-104606、US 5739888、5729312。

據上論結，本案不符法定專利要件，爰依專利法第二十條第二項，審定如主文。

局長  
**蔡練生**

依照分層負責規定授權單位主管決行

如不服本審定，得於文到之次日起三十日內，備具再審查理由書一式二份及規費新台幣陸仟元整（專利說明書及圖式合計在五十頁以上者，每五十頁加收新台幣五百元，其不足五十頁者以五十頁計），向本局申請再審查。